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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,949	07/16/2003	Todd Jordan	HON 1448-021B	8580
8698	7590	04/22/2004	EXAMINER	
STANDLEY LAW GROUP LLP 495 METRO PLACE SOUTH SUITE 210 DUBLIN, OH 43017			LIN, ING HOUR	
			ART UNIT	PAPER NUMBER
			1725	

DATE MAILED: 04/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/620,949

Applicant(s)

JORDAN ET AL.

Examiner

Ing-Hour Lin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address.
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
3. Claims 1-4 and 6-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Renkl et al in view of Harbottle et al.

Renkl et al (col. 14, lines 33+) teach the claimed spraying system 10 under the control of a control unit 20 for preparing the walls of a mold for molding or shaping to make them ready for the next molding cycle, comprising: spray tool 22 with a plurality of spray or blowing elements 24, 26, 28; a manipulator (six-axis industrial robot 30) for inserting the spray tool between open mold halves 12c, 12d, and controlling the linear motion of the manipulator for the purpose of moving the spray tool at a desired speed v into any desired orientation in space at any point along

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a desired path B; sensors and control units 20 for operating signals for directing the a manipulator (six-axis industrial robot 30) and the spray elements 24 or the devices which serve these spray elements such as pumps and valves (col. 16, lines 49+) and flow rate sensors 60 for the supply of fluid materials such as cooling water, blown air and lubricant agents from a source of material such as a tank 40 in a program-controlled manner. Renkl et al fail to teach the use of a pressure boosting device.

However, Harbottle et al (page 8, lines 6+) teaches the use of a pressure boosting device of a force-exerting cylinder (electronically controlled injector D) comprising: an accumulator chamber 90, a force-exerting cylinder (intensifier cylinder 86) contains an intensifier piston 104, conduits (inlet passage 120, connecting passage 130), solenoid valve 122 and check valve 110 for the purpose of controlling and regulating and intensifying lubricating oil. It would have been obvious to one having ordinary skill in the art to provide Renkl et al the use of a pressure boosting device as taught by Harbottle et al in order to effectively control and regulate and intensify the spraying system.

4. Claims 5 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Renkl et al in view of Harbottle et al and further in view of Kitamura et al.

Renkl et al in view of Harbottle et al fails to teach the use of an injection cylinder flow-control valve and a boost cylinder flow-control valve. However, Kitamura et al (col. 10, lines 21+) teach the use of an injection cylinder flow-control valve 17 and a boost cylinder flow-control valve 45 (see Fig. 7) for the purpose of controlling the speed of the force exerting cylinder and supplying material the spray head at a substantially constant pressure. It would

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have been obvious to one having ordinary skill in the art to provide Renkl et al in view of Harbottle et al the use of an injection cylinder flow-control valve and a boost cylinder flow-control valve as taught by Kitamura et al in order to effectively control and regulate and intensify the spraying system.

5. Claims 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harbottle et al in view of Kitamura et al.

Harbottle et al (page 8, lines 6+) teach the claimed pressure boosting device of a force-exerting cylinder (electronically controlled injector D) comprising: an accumulator chamber 90, a force-exerting cylinder (intensifier cylinder 86) contains an intensifier piston 104, conduits (inlet passage 120, connecting passage 130), solenoid valve 122 and check valve 110 for the purpose of controlling and regulating and intensifying lubricating oil. Harbottle et al fails to teach the use of a controller, an injection cylinder flow-control valve and a boost cylinder flow-control valve. However, Kitamura et al (col. 8, lines 1+) teach the use of a controller, an injection cylinder flow-control valve 17 (col. 10, lines 21+) and a boost cylinder flow-control valve 45 (see Fig. 7) for the purpose of controlling the speed of the force exerting cylinder and supplying material the spray head at a substantially constant pressure. It would have been obvious to one having ordinary skill in the art to provide Renkl et al in view of Harbottle et al the use of a controller, an injection cylinder flow-control valve and a boost cylinder flow-control valve as taught by Kitamura et al in order to effectively control and regulate and intensify the spraying system.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ing-Hour Lin whose telephone number is (571) 272-1180. The examiner can normally be reached on M-F (8:00-5:30) Second Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on (571) 272-1171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

I. H. Lin

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4-13-04



TOM DUNN
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